EPI INFO™ WEB SURVEY SYSTEM INTEGRATED PACKAGE DEPLOYMENT

Version 1.9 3/21/2016

Revision Date: 3/21/2016 Page 1 of 50

VERSION HISTORY

Version #	Implemented By	Revision Date	Comments
1.0	Sachin Agnihotri	09/18/2012	Version 1.0 of the document
1.1	David Nitschke	10/15/2012	Edits applied for eClearance
1.2	David Nitschke	11/09/2012	Edits applied for eClearance and approval received. Document is Cleared for distribution.
1.3	Sachin Agnihotri	04/08/2013	Updates for changes in Version 1.1.4.0 of the system.
1.4	Sachin Agnihotri	07/29/2013	Update for changes in Version 1.2.0.0 of the system
1.5	Sachin Agnihotri	09/19/2013	Instructions for upgrading an existing instance of the system
1.6	Sachin Agnihotri	01/07/2014	Updated made to Conventions and Error Messages section
1.7	Sachin Agnihotri	03/12/2014	Updated connection string section
1.8	Sachin Agnihotri	10/15/2014	V1.3.0.0 settings and updates for user interface customization
1.9	Coryne Taska	3/21/2016	Updated formatting for accessibility standards (508)

Revision Date: 3/21/2016 Page 2 of 50

TABLE OF CONTENTS

1	INTE	NTRODUCTION4			
	1.1	Purpos	se	4	
	1.2	Audien	nce	4	
2	SYST	STEM DESCRIPTION			
	2.1		eatures		
	2.2	•	ory		
	2.3	Enviror	nment	5	
	2.4	System	n Operations	6	
	2.5	System	n Architecture	6	
3	APPI	ICATION	INSTALLATION	7	
	3.1	First-Ti	ime Users	7	
	3.2	Access	s Controls	7	
		3.2.1 Data	abase	7	
		3.2.2 App	olication and Services	8	
	3.3	Installa	ation	8	
	3.4	Config	uration	8	
		3.4.1 Data	abase Configuration	8	
		3.4.2 App	olication and Services Configuration	13	
	3.5	Starting	g the System	29	
4	APPLICATION UPGRADE				
	4.1	Access	s Controls	32	
		4.1.1 Data	abase	32	
		4.1.2 App	olication and services	32	
	4.2	Installir	ng The Upgraded Version	32	
	4.3	Config	uration	32	
		4.3.1 Data	abase Configuration	32	
		4.3.2 App	olication and Services Configuration	36	
5	SYST	EM USAG	E	38	
	5.1	Instruc	tions	38	
	5.2	Conve	ntions and Error Messages	38	
		5.2.1 Epi	Info Web Survey Manager Service Test	38	
		5.2.2 Orga	anization Account Creation Test	39	
		5.2.3 Data	abase Connection String Test	40	
		5.2.4 App	olication's Database Connection String Test	41	
		5.2.5 Epi	Info Web Survey Test	42	

1 INTRODUCTION

1.1 PURPOSE

The vision of the Epi Info™ Web Survey system is to use the Epi Info 7 application to create online surveys to help the public health community conduct surveys, gather useful information for analysis, and to further support the mission of public health by facilitating public health data collection in geographically distributed locations, as well as enabling a targeted participant pool.

1.2 AUDIENCE

The audience for this document includes system administrators, database administrators, and information technology personnel who will be configuring the system on web and database servers.

2 SYSTEM DESCRIPTION

2.1 KEY FEATURES

The Epi Info Web Survey system enables the following functionalities on the web:

- Capability to deploy on the web: Provides a service to allow publishing a survey created using Epi Info 7 on the web.
- **Enable survey on the web:** Provides a means to dynamically present the survey participant with the survey on the web that has been created and published from Epi Info 7.
- **Support data collection**: Supports data collection by supporting surveys created using the following controls: Label, single line text box, multi-line text box, numeric text box, date/time picker, check box, drop-down list and group box.
- Support logic control in surveys: Enables data entry for surveys on the web by supporting skip logic and navigation logic. It also has the ability to hide, unhide, highlight, un-highlight, enable and disable survey questions when certain conditions/criteria are met.
- **Support flexible participation**: Allows survey participants access to the survey, complete the survey in one session, or save the responses to complete and submit the survey at a later time.
- Capability to download data: Provides a service to download the survey responses into Epi Info 7 for analysis.

2.2 INVENTORY

The integrated deployment package consists of a compressed folder structure having two main parts: 1) database and 2) application and services. The database scripts are present in the Database folder. All files for the Application and Services part are provided in ApplicationAndServices folder.

Revision Date: 3/21/2016 Page 4 of 50

2.3 ENVIRONMENT

Below is a list of hardware and software requirements, and operational activities needed for the deployment of the Epi Info Web Survey system:

Hardware:

- Web server: Windows server 2008 or Windows Server 2008 R2
- Database server: Windows Server 2008 or Windows Server 2008 R2

Software:

- Web server:
 - Internet Information Services (IIS) 7.0 / 7.5
 - .NET 4.0
 - ASP.NET MVC 4
- Database server
 - SQL Server 2008
- SMTP Server
 - The application would need to know the name of an SMTP server within the network that it can use.
- Survey Manager Admin Client
 - Survey Manager Admin client is included in the installation package. While the Survey Manager Admin client can be installed on a different machine than the web server, the installation of the Epi Info Web Survey system is a lot easier with Survey Manager Admin Client installed on the server as well.

Operational activities:

- A system engineer, IT engineer with administrative access on the web server configures the application.
- A database administrator with administrative access on the database server configures the database.

Note: ASP.NET MVC 4 is the recommended version of ASP.NET MVC framework but is not a prerequisite for installation. ASP.NET MVC 3 is the default version that is installed with .NET 4.0. The system will work with ASP.NET MVC 3 on the server if installing ASP.NET MVC 4 is not an option. All the assemblies that are needed by the application or that are specific to ASP.NET MVC 4 are packaged with the application.

Revision Date: 3/21/2016 Page 5 of 50

2.4 SYSTEM OPERATIONS

The system will be used for:

- publishing surveys;
- · conducting online surveys; and
- downloading the survey responses.

Depending on the nature of the survey and how it is conducted, the system could have a surge in web server traffic.

2.5 SYSTEM ARCHITECTURE

The Epi Info Web Survey system has the following components:

- Epi Info Web Survey Manager Service: This web service:
 - securely publishes a survey to the web from the Epi Info 7 Form Designer;
 - o stores the meta-data for creation of the survey to the database; and
 - securely downloads the survey responses to the Epi Info 7 Enter module.
- Epi Info Web Survey Web Application: The web application dynamically renders the web survey for the survey participant to access and complete.
 Surveys may be completed in one session or saved and completed another time.
- **Epi Info Web Survey Data Service**: This data service provides the web application with the meta-data to render the survey to the web. It also manages the data collected from survey participants.
- Epi Info Web Survey Database: The system uses a relational database to manage:
 - organizations that conduct surveys;
 - surveys published by the organizations; and
 - o responses provided by the survey participants.

The diagram below summarizes these components and their interactions.

Revision Date: 3/21/2016 Page 6 of 50

Epi Info Web Survey Web Application Epi Info Web Survey Data Service Survey Manager Service Epi Info Web Survey Manager Service Epi Info Web Survey Manager Service Epi Info 7

EPI INFO WEB SURVEY

Figure 1: Overview of Epi Info Web Survey System

3 APPLICATION INSTALLATION

3.1 FIRST-TIME USERS

In order to use the Epi Info Web Survey system, an Administration Key must be created and encrypted as described later in this document. The Administration key is needed by the Epi Info Survey Manager Admin Client to:

- configure the application;
- create and manage organization accounts; and
- update survey information.

To perform any above mentioned operation, Survey Manage Admin client has to be installed either on System Administrator's machine or on the web server. More information on Survey Manager Admin Client can be found in EIWS Admin Client Help document.

3.2 ACCESS CONTROLS

3.2.1 Database

The person creating and configuring the database should have full administrative access on the database server and rights and privileges to create a database, create database users, and grant access to the database.

Revision Date: 3/21/2016 Page 7 of 50

3.2.2 Application and Services

The person installing and configuring the application and services should have administrative access on the web server and should have full access and privileges to create a web application in Internet Information Services (IIS).

3.3 INSTALLATION

The installation can be done using the **EIWSIntegrated** package. The package for installation of the system consists of two items: 1) the database in the **Database** folder; and 2) the application and services in the **ApplicationAndServices** folder. The Configuration section describes how these items are used.

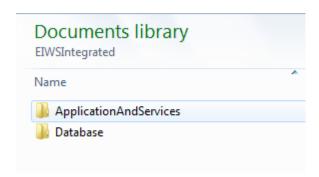


Figure 2: File systems showing components in the EIWSIntegrated package

3.4 CONFIGURATION

3.4.1 Database Configuration

The database for this application requires SQL Server 2008 and should be created on a SQL Server 2008 database server. Creation of the database may require assistance from a SQL Server DBA if access to the database server is managed by the DBA. The scripts should be changed as needed for local circumstances or as per best practices followed by the organization deploying this system.

- Choose the database server where the database will be hosted. Log into the database server using an account which has admin privileges to create the database, the database user, and assign privileges to the user.
- 2. Open the provided script named eiws_complete.

Revision Date: 3/21/2016 Page 8 of 50

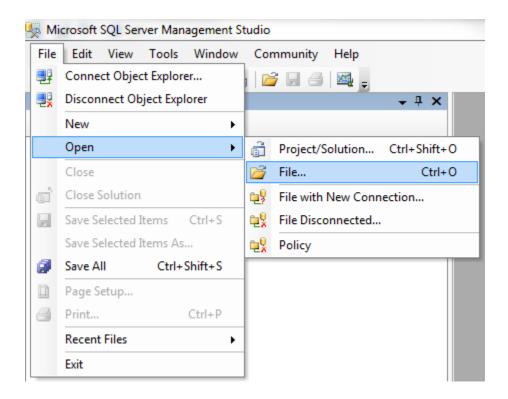


Figure 3: File menu to open the database script file

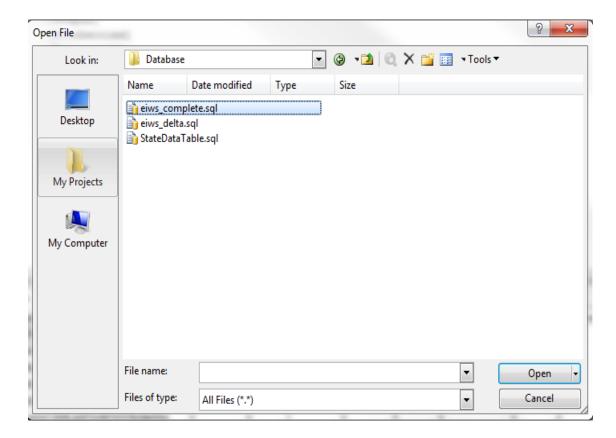


Figure 4: Open File dialog showing the eiws_complete script.

Revision Date: 3/21/2016 Page 9 of 50

3. In the script, change the password to a strong password, per your local policy, before executing the script.

```
eiws_complete.sql ...sql.EIWS (SA (59))
☐ IF EXISTS (SELECT * FROM sys.foreign_keys WHERE object_id = OBJECT_ID(N'[dbo].[FK_SurveyResponse_SurveyMetaData]') A
LALTER TABLE [dbo].[SurveyResponse] CHECK CONSTRAINT [FK_SurveyResponse_SurveyMetaData]
 /***** Insert Metadata ******/
 ☐ INSERT [dbo].[lk_SurveyType] ([SurveyTypeId], [SurveyType]) VALUES (1, N'Single Response')
 INSERT [dbo].[lk_SurveyType] ([SurveyTypeId], [SurveyType]) VALUES (2, N'Multiple Response')
 INSERT [dbo].[lk_Status] ([StatusId], [Status]) VALUES (1, N'In Progress')
 INSERT [dbo].[lk_Status] ([StatusId], [Status]) VALUES (2, N'In Progress (URL)')
 INSERT [dbo].[lk_Status] ([StatusId], [Status]) VALUES (3, N'Complete')
/* For security reasons the login is created disabled and with a random password. */
 /***** Object: Login [eiws_appu
                             ASSWORD=N'ê" O≎W±jŏïg-_î∱%uŠ¥çôÌñ÷{□ÈS<á@',
 CREATE LOGIN [eiws_appuser] WITH
                                                                  DEFAULT DATABASE=[EIWS], DEFAULT LANG
 CREATE USER [eiws appuser] FOR LOGIN [eiws appuser] WITH DEFAULT SCHEMA=[dbo]
 EXEC sp_addrolemember db_datareader, eiws_appuser
 EXEC sp_addrolemember db_datawriter , eiws_appuser
```

Figure 5: Change the password in the database script

4. Execute the script to create the database, metadata, application user account and appropriate privileges.

Note: If you receive an error at this point, check to see if your hard-coded paths (tied directly to your machine) have the appropriate path and version of SQL. For example: C:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\MSSQL

Revision Date: 3/21/2016 Page 10 of 50

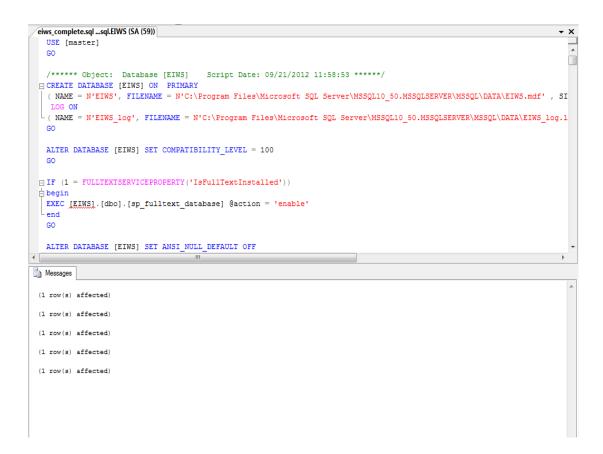


Figure 6: Result windows showing the result of executing the eiws_complete script

5. The *eiws_complete* script will create a database called **EIWS** and will create the schema and the metadata needed for the system. The script also creates a user account called **eiws_appuser** that can be used by the application for accessing the database. The output is shown in the figures below:

Revision Date: 3/21/2016 Page 11 of 50

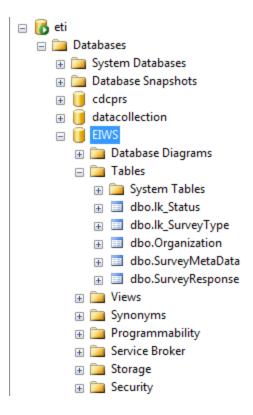


Figure 7: Confirmation of the creation of the EIWS database

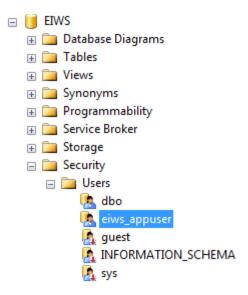


Figure 8: Confirmation of the creation of the eiws_appuser account

6. Provide the database name, application user name and password to the person that will provide ongoing management of the Epi Info Web Survey system. This information will be used to create the connection string.

Revision Date: 3/21/2016 Page 12 of 50

7. You can also execute the StateDataTable.sql in case you are enabling account creation functionality and are in United States. The script populates list of states in United States in the States table to be used by Epi Info Web Survey system as part of User centric account creation option.

3.4.2 Application and Services Configuration

The application and services configuration results the Epi Info Web Survey Web application, the Epi Info Web Survey Manager Service, and the Epi Info Web Survey Data Service being configured as a single integrated application on the Internet Information Services (IIS).

The steps below assume that the EpiInfoWebSurvey web site is being configured as an application under the default web site. This may not always be the case depending on your local policies. If needed, the site can be configured as its own web site.

- 1. Create a folder called "EpiInfoWebSurvey" under "inetpub\wwwroot". Copy the contents of the folder "EIWSIntegrated\ApplicationAndServices" (and not the folder itself) to the "inetpub\wwwroot\EpiInfoWebSurvey" folder.
- 2. Create an application named "EpiInfoWebSurvey" in IIS.
- Make sure that the site is configured to run on an Application pool that is configured to use .NET 4.0. You can use one of the default application pools called **Default Web Site** or Default AppPool . This application pool uses a Managed Pipeline Mode of "Integrated".

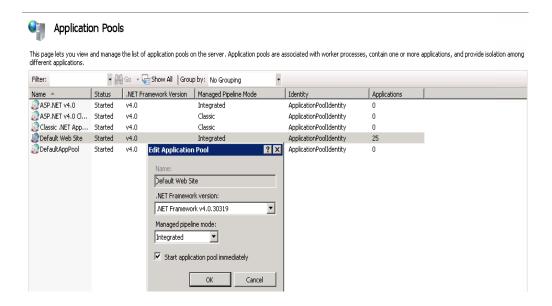


Figure 9: Application pool configured using .NET 4.0

Revision Date: 3/21/2016 Page 13 of 50

4. Make sure the site uses Anonymous authentication. This is the default setting when the site is configured in IIS.

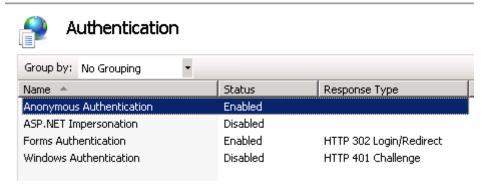


Figure 10: Application configured with Anonymous Authentication Enabled

5. Open the web.config file in EpiInfoWebSurvey folder for editing in your preferred editor.

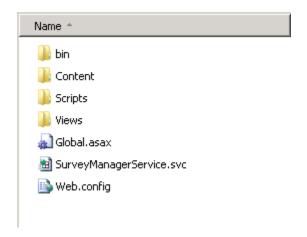


Figure 11: Web.config file for an integrated application

6. Update Email notification section in the web.config file.

a) EMAIL_USE_AUTHENTICATION: The default value is FALSE. Change this to TRUE if authentication is used.

Revision Date: 3/21/2016 Page 14 of 50

- b) EMAIL_USE_SSL: The default value is FALSE. Change this to TRUE if SSL is used.
- c) EMAIL_FROM: Provide an email address that can be used for the FROM part of the email.
- d) EMAIL_PASSWORD: A value needs to be provided here only if the EMAIL_USE_AUTHENTICATION is TRUE in step 6a above.
- e) SMTP_PORT: The system uses the default value of 25. Only provide a port number if the port number is other than 25.
- f) SMTP_HOST: This value has to be provided. This should be the name of the SMTP server used by the organization.

The system has built in capability to send email. The survey participant has an option to receive an email with a link and a passcode to access their survey response in case they are not able to complete the survey in one session. The settings above, in conjunction with settings specified in Step 9, can be used by the system to send exception email messages to a specified email account.

7. If you want to receive system exception email messages, update the Log Setting section in the web.config file.

```
<!-- Log Setting -->
<add key="LOGGING_SEND_EMAIL_NOTIFICATION" value="FALSE"/>
<add key="LOGGING_ADMIN_EMAIL_ADDRESS" value="XXXXXX"/>
<add key="LOGGING_EMAIL_SUBJECT" value="Epi Info Web Survey - Exception"/>
```

- a) LOGGING_SEND_EMAIL_NOTIFICATION: The default value is set to FALSE. Change this to TRUE in order to receive exception emails in case of system failure.
- b) LOGGING_ADMIN_EMAIL_ADDRESS: Provide an email address that can receive exception emails in case of system failure.
- c) LOGGING_EMAIL_SUBJECT: Update the value with the subject you would like to see for exception emails.
- 8. The application is designed to leverage caching to store survey meta information in memory on the web server in order to optimize performance, if needed. A very small amount of memory is used and is directly proportional to the size of survey meta information. Enabling caching comes at a cost. If the survey designer makes changes to survey meta data, and then wants to check that his/her changes were made, the revisions are not instantly visible. In the default configuration, caching has been disabled for the application. Caching setting can be customized as per local policies or per your needs. Below are the settings for caching:

```
<!--Caching-->
```

Revision Date: 3/21/2016 Page 15 of 50

```
<add key="CACHE_IS_ON" value="FALSE"/>
<add key="CACHE_DURATION" value="20"/>
<add key="CACHE_SLIDING_EXPIRATION" value="TRUE"/>
```

- a) CACHE_IS_ON: Default value of "FALSE" indicates the application is not caching any information on the server. Changing the value to "TRUE" will turn on caching for the application allowing the application to store survey meta data on the server for a given survey.
- b) CACHE_DURATION: Duration for the cache is set to 20 minutes. The value can be changed to increase or decrease the duration the cache is maintained.
- c) CACHE_SLIDING_EXPIRATION: The default value of "TRUE" indicates that the cache is set to expire at the defined duration on a sliding scale. If the site is accessed by any user during the defined duration, the sliding scale is again reset. To change the cache to expire at an absolute duration defined by the CACHE_DURATION value, the value for CACHE_SLIDING_EXPIRATION can be changed to "FALSE".

With CACHE_IS_ON set to "FALSE" the value for CACHE_DURATION and CACHE_SLIDING_EXPIRATION are not applicable. The application will work without caching and still perform well.

9. Update the Integrated Epi Info Web Survey Manager Service settings.

```
<!--Integrated SurveyManagerService Settings-->
<add key="URL" value="http://SERVER_NAME/<APPLICATION_NAME/Home/"/>
<add key="AdminKey" value="A/kTiX1HhAef9pdWIbGCKslNOcEvoxqUrSWahJoB7uGN3+/YROi4alwj9UWZLmXy"/>
```

- a) URL: Update the SERVER_NAME and APPLICATION_NAME marked in yellow in the value for the URL
 - i. SERVER_NAME is the Domain Name Server (DNS) name of the web server where the application is hosted.
 - ii. APPLICATION_NAME is the application name created in IIS.
- b) AdminKey: Provide the encrypted value of the GUID that will be used as the AdminKey.
 - Create a GUID using one of the online sites that creates GUID strings such as <u>Microsoft's GuidGen Tool</u> (http://www.guidgen.com).
 - ii. Encrypt the GUID using Epi Info Web Survey Manager Admin Client
 - iii. Replace the value for AdminKey with the encrypted value.

Revision Date: 3/21/2016 Page 16 of 50

- iv. IMPORTANT: Do not lose the Admin Key GUID. This is required for communication between Epi Info Web Survey Manager Admin Client and the Epi Info Web Survey Manager Service.
- 10. Referring to the document titled, "EIWS Admin Client Help," create the connection string that points to your database. To do this, replace the text marked in yellow with the appropriate value in the plain text connection string provided below.

metadata=res://*/Epi.Web.Model.csdl|res://*/Epi.Web.Model.ssdl|res://*
/Epi.Web.Model.msl;provider=System.Data.SqlClient;provider
connection string= 'Data Source=DATABASE_SERVER_NAME;Initial
Catalog=DATABASE_NAME;Persist Security Info=True;User
ID=APPLICATION_ACCOUNT;Password=PASSWORD_FOR_ACCO
UNT;MultipleActiveResultSets=True'

Below is an example of a connection after replacing the yellow text.

metadata=res://*/Epi.Web.Model.csdl|res://*/Epi.Web.Model.ssdl|res://*/Epi.Web.Model.ssdl|res://*/Epi.Web.Model.msl;provider=System.Data.SqlClient;provider connection string= 'Data Source= etiei-sql;Initial Catalog=EIWS;Persist Security Info=True;User ID=eiws_appuser;Password= h74\$H4d@m23&Bw=GXH8%-MuH5h;MultipleActiveResultSets=True'

Note:

- i. The entire block, starting from "metadata" and ending with "=True" comprises the connection string. Use the complete string provided above and not just the subpart that says "connection string".
- ii. The connection string subpart is wrapped in single quotes. In other words, the phrase <u>connection string=</u> is followed by an opening single quote (apostrophe) and at the end of the connection string subpart following <u>=True</u> there is the closing single quote.
- iii. Check the Data Source name with your DBA team in case the application is deployed in a DMZ. In such cases, the Data Source may also include a port number.
- iv. When copying this connection string from the PDF document to your chosen editor, additional spaces may get created at line breaks resulting in the application unable to communicate with

Revision Date: 3/21/2016 Page 17 of 50

- the database. In particular, please note that there are no spaces in the three metadata element strings which are separated by a vertical bar or pipe symbol (|). For example: res://*/Epi.Web.Model.msl
- v. In the connection string, the phrases "Data Source", "Initial Catalog", "Persist Security Info" and "User ID" all have a single space between the words.

Encrypt the connection string using the Survey Manager Admin Client, which is a separate install, and is included in the package (instructions on how to install can be found in the Epi Info Web Survey Admin Client Help Guide). The figure below shows the part of Survey Manager Admin Client which provides the encryption functionality. Only the Encrypt Connection String section is used for encryption. The Local Settings section does not play any part in encryption. The instructions for encrypting the connection string can be found in the EIWS Admin Client Help document. Make a note of the encrypted connection string in a file in order to use it in the next step.

Revision Date: 3/21/2016 Page 18 of 50

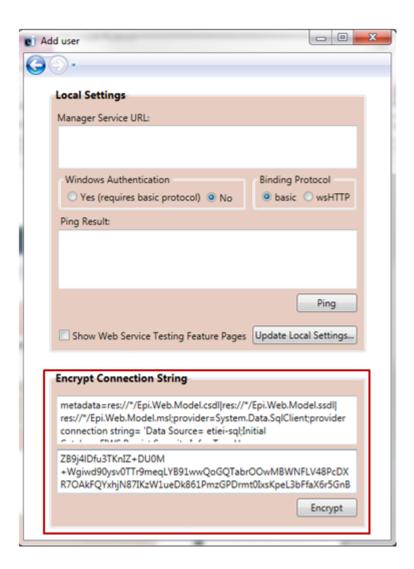


Figure 12: Encryption utility in Survey Manager Admin Client.

11. Update the connection string for "EIWSEntities" marked in yellow below in the web.config file with the encrypted string.

<add name="EIWSEntities" connectionString="ZB9j4lDfu3TKnIZ+DU0M+Wgiwd90ysv0
TTr9meqLYB91wwQoGQTabrOOwMBWNFLV48PcDXR7OAkFQYxhjN87IKzW1ueDk861PmzGPDrmt0I
xsKpeL3bFfaX6r5GnBC4K/0MeReTiJ7YGedDUwtrtsx+8eOxAusj2LW25tTdwGCOz/qLhitzcJk
zqS7IWQNb+y+TFc/0Hwrsb/6wKjomdt0kLkT+JqCgNHwVZ2q5NJapy+GOXUraOWrQfuIEz6KQ8u
034rK7U6mvTIH6Z644PSkcjXx2XFVciTMd/7r2cEbnI7dyBT8PX9KRZEwQJjfNlG5SlvEbk/Wwt
re4IR7T1A2rmbgnd11Phi80TUpM5yIbxFnW6ytvDVZq1afAhFqV/bv9rte7fQQjjxqxkE6rugw3
upSKjnKtjOWemHApaNvtRlRnqNfADEC16DgcisqfC"/>

12. Create another connection string by replacing the value of the text marked in yellow with the appropriate value in the plain text connection string provided below.

Revision Date: 3/21/2016 Page 19 of 50

Data Source=DATABASE_SERVER_NAME;Initial
Catalog=DATABASE_NAME;User
ID=APPLICATION_ACCOUNT;Password=PASSWORD_FOR_ACCOUNT

Below is an example of a connection string after replacing the yellow text

Data Source=etiei-sql;Initial Catalog=EIWS;User ID=eiws_appuser;Password=h74\$H4d@m23&Bw=GXH8%-MuH5h

Encrypt the connection string above as done previously for the EIWSEntities connection string and update the connection string for "EIWSADO" marked in yellow below in the web.config file with the encrypted string.

<add name="EIWSADO" connectionString="
EJuEgfj+SZ/i1picmKRdY0WUG+2b0LNqG39YC5h1dKMx+cWdsLTQBBMO7a7xXPWWJ19sm2fURgh
VQuuZeWF0mXZah16nQtD0eYXgUomP92vg0ELpbwsfoLWClezIf7knrLXpyUUy/qhbQ6rTP7QoZ0
fCzH0HnRbqFE8QqjatmCo="/>

- 13. Provide the following information about the Epi Info Web Survey Manager Service to the Administrator managing the system.
 - a) URL for the Survey Manager Service http://SERVER_NAME/APPLICATION_NAME/SurveyManagerS ervice.svc

Update the SERVER_NAME and APPLICATION_NAME, marked in yellow, in the value for the URL.

- SERVER_NAME is the Domain Name Server (DNS)
 name of the web server where the application is hosted.
- ii. APPLICATION_NAME is the application name created in IIS.
- b) Windows Authentication value is **No**
- c) Binding Protocol used is **Basic**

The information provided above is to be used by the Administrator to access the Epi Info Web Survey Manager Service from the Survey Manager Admin Client. The information is provided in the Local Settings section of the Survey Manager Admin Client as shown in the figure below. Detailed instructions are provided in the EIWS Admin Client Help document. After providing the above value, click on the Ping button to provide an indicator in the Ping Result text box to show if communication with the service is successful. The settings can be saved by clicking on the Update Local Settings button.

Revision Date: 3/21/2016 Page 20 of 50

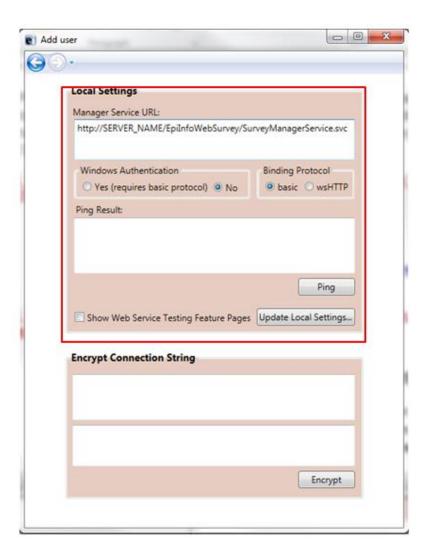


Figure 13: Local settings section in Survey Manager Admin Client for testing service communication and to update local settings.

This information is also to be provided to the epidemiologist or survey designer for them to be able to publish the form to web. On the Epi InfoTM 7 desktop, select Tools > Options. Select the Web Survey tab. The information goes in the Endpoint Address field on the Web Survey tab.

14. There are a few additional settings in the web.config file which do not need any updating. These are listed below:

Revision Date: 3/21/2016 Page 21 of 50

15. Epi Info Web Survey comes with a footer which has the Epi Info, CDC and HHS logos as shown below.

The CDC and HHS images can be replaced with single custom image that represents your organization's image or logo. In addition, support information containing email and telephone number can be provided in the footer if needed.



Figure 14: Footer of Epi Info Web Survey

Steps to add a custom image in the footer are provided below:

 Add the image or logo for your organization in following folder on the web server

```
"/<APPLICATION NAME>/Content/images/"
```

APPLICATION_NAME is the application name created in IIS.

b) Provide the value for "FOOTER_LOGO_PATH" in web.config

```
<add key="FOOTER LOGO PATH" value=" "/>
```

The value for FOOTER_LOGO_PATH can be provided by replacing the IMAGE_NAME in the string below with the name of the image or logo of your organization.

```
~/Content/images/<IMAGE NAME>
```

Note: The package come with value of "FOOTER_LOGO_PATH" as empty which results in displaying default CDC logos or images. The recommended size for image or logo of your organization is 42 x 42 in case you want to replace the default image or logos.

Revision Date: 3/21/2016 Page 22 of 50

Steps to include support information in the footer are provided below:

 Set the value for "TECHNICAL_SUPPORT_IS_ENABLED" in web.config to "TRUE". The package is provided with technical support information disabled.

```
<add key="TECHNICAL_SUPPORT_IS_ENABLED" value="FALSE"/>
```

Provide the information needed in step (b) and (c) if the value is set to "true".

b) Update the value for "TECHNICAL_SUPPORT_EMAIL" with the appropriate email address

```
<add key="TECHNICAL_SUPPORT_EMAIL" value=" "/>
```

c) Update the value for "TECHNICAL_SUPPORT_PHONE" with the appropriate phone number.

```
<add key="TECHNICAL_SUPPORT_PHONE" value=" "/>
```

16. Epi Info Web Survey Home page or the first launch page of the survey can be configured to show a larger image or logo of your organization in the body of the page.

Steps to enable a larger custom image or logo are provided below:

a) Add the image or logo for your organization in following folder on the web server

```
"/<APPLICATION NAME>/Content/images/"
```

APPLICATION_NAME is the application name created in IIS.

b) Set the value for "SHOW_HOME_LOGO" to "TRUE". The package is provided with this value being empty.

```
<add key="SHOW_HOME_LOGO" value=""/>
```

c) Update the value for "HOME LOGO PATH" in web.config file

```
<add key="HOME_LOGO_PATH" value=" "/>
```

The value for HOME_LOGO_PATH can be provided by replacing the IMAGE_NAME in the string below with the name of the image or logo of your organization.

~/Content/images/<IMAGE NAME>

Revision Date: 3/21/2016 Page 23 of 50

Note: The package comes with value of "HOME_LOGO_PATH" as empty resulting in no image shown in the body of the home or launch page. The recommended size for larger image or logo of your organization is a width of 300 pixels.

17. Epi Info Web Survey can be deployed using one of the two color themes "Classic" or "Blue" provided in the package and as shown below.

Classic Theme Epi Info Demo Survey Write an introduction to your survey here. Begin Survey Survey States Date: Twestey, 349, 27, 2984 1209 AAI Survey Crosing Date: Stander, June 18, 2155 1209 AM

Blue Theme



Figure 15: Snapshot of two color themes available for Epi Info Web Survey

Steps to enable the color theme are provided below:

a) Update the value for "CUSTOM THEME" in web.config file

```
<add key="CUSTOM_THEME" value="BLUE"/>
```

- The value can be one of "BLUE" or "CLASSIC". The package is provided with CLASSIC theme enabled.
- 18. Epi Info Web Survey has provided the option to request account from the system without an Administrator having to be involved in the process and creating Organization accounts using Survey Manager Admin Client tool. It would require update of the following settings in the web.config file. By default this option is turned off in the provided package and should be configured only if you plan to make use of this option.

```
<add key="ACCOUNT_TYPE" value=""/> <!--
Can have two values (USER OR ORGANIZATION) -->
<add key="ENDPOINT_ADDRESS" value="http://SERVER_NAME/APPLICATION_NAME/Surve
yManagerService.svc"/>
<add key="NOTIFY_ADMIN_IS_ENABLED" value="False"/>
```

Revision Date: 3/21/2016 Page 24 of 50

```
<add key="SYSTEM_ADMIN_EMAIL" value="me@here.now"/> <!--
Email address included in the body of the email for account creation -->
<add key="NOTIFY_ADMIN_EMAIL" value="me@here.now" /> <!--
Email address to which notifications go out-->
```

If you plan to use this feature update the settings as per direction provided below

- a) ACCOUNT_TYPE: Possible values are "USER" or "ORGANIZATION". Depending on the option chosen the account creation form will change. Below are the screenshots for the states of Account creation page namely no account type, User centric account type and Organization centric account.
- b) ENDPOINT_ADDRESS: This should match the URL of Survey Manage Service created in Step 13 above.
- c) NOTIFY_ADMIN_IS_ENABLED: Set the value to true if an admin should be notified every time an account is created in the system else leave it False.
- d) SYSTEM_ADMIN_EMAIL: This is the email address of the admin that can be contacted in case there is a problem with the system. This email address is included in the body of the email sent out at time of account creation
- e) NOTIFY_ADMIN_EMAIL: This is the email address of the Admin that needs to be informed whenever an account is created in case NOTIFY_ADMIN_IS_ENABLED is true.

The Account creation page can be accessed by following URL: http://SERVER_NAME/APPLICATION_NAME/Account.

Update the SERVER_NAME and APPLICATION_NAME marked in yellow in the value for the URL

- SERVER_NAME is the Domain Name Server (DNS) name of the web server where the application is hosted.
- ii. APPLICATION_NAME is the application name created in IIS.

Shown below are screenshots for the three possible state of Account creation page depending on the configuration namely no account type specified, User centric account type and Organization centric account type.

Revision Date: 3/21/2016 Page 25 of 50

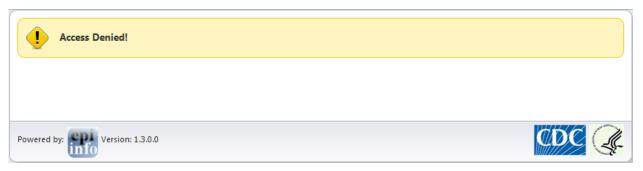


Figure 16: The state of Account creation page when account creation option is not enabled.

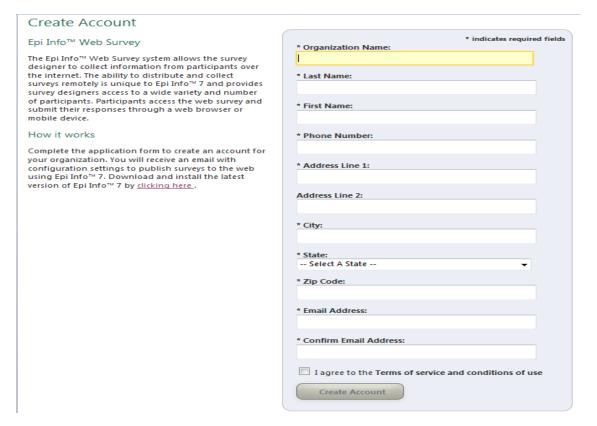


Figure 17: The state of Account creation page when account creation option is set to USER.

Revision Date: 3/21/2016 Page 26 of 50

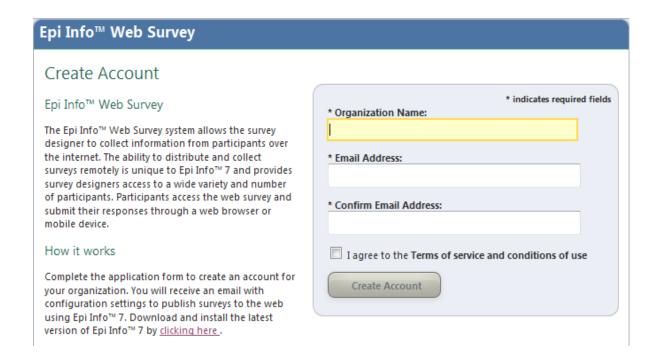


Figure 18: The state of Account creation page when account creation option is set to ORGANIZATION.

Note: Account creation option should be enabled only after due consideration as the URL for the account creation page once made public can be accessed by anyone and may result in ambiguous user accessing this page and creating account.

Revision Date: 3/21/2016 Page 27 of 50

19. The *Terms of service and conditions of use* can be provided on Account creation page for anyone requesting an account to agree to before proceeding receiving an account. This would need to be done only if you are enabling account creation option. The terms of use can be provided by updating "TermsOfUse.txt" document. This document can be found in "EIWSIntegrated\ApplicationAndServices\Content\Text" folder of the application package. Once the document has been updated with correct text it needs to be updated on the web server in "EIWS\Content\Text" folder.



EPIINFO SURVEY TOOL WEBSITE AND SERVICE TERMS OF USE

Version 1.0

PLEASE READ THE FOLLOWING TERMS OF USE CAREFULLY. BY CLICKING "I ACCEPT," REGISTERING FOR AN ACCOUNT, ACCESSING OR USING THE EPIINFO SURVEY TOOL WEBSITE AND SERVICE, YOU ACKNOWLEDGE THAT YOU HAVE READ, UNDERSTOOD, AND AGREE TO BE BOUND BY THE FOLLOWING TERMS OF USE AND ANY FUTURE MODIFICATIONS (ALSO REFERRED TO AS THE "AGREEMENT").

Figure 19: The Terms of service and conditions of use section on Account creation page

Note: If you want your text to be formatted then HTML equivalent of your text along with its styles need to be provided in this document.

20. Epi Info Web Survey provides capability to pre generate a response URL and passcode that can be used by an organization to meet their specific data collection need. Enabling this feature requires integration with Survey Manager Service API and updating the following setting in web.config file:

```
<add key="ResponseURL" value="http://SERVER_NAME/APPLICATION_NAME/Survey/"/>
```

Update the SERVER_NAME and APPLICATION_NAME marked in yellow in the value for the URL:

- SERVER_NAME is the Domain Name Server (DNS) name of the web server where the application is hosted.
- ii. APPLICATION_NAME is the application name created in IIS.

Revision Date: 3/21/2016 Page 28 of 50

This capability would require custom code to be written by your development team to integrate with Survey Manager Service API. Provide the following information about the Epi Info Web Survey Manager Service to the development team writing the customization:

a. URL for the Survey Manager Service http://SERVER_NAME/APPLICATION_NAME/SurveyManagerS erviceV2.svc

Update the SERVER_NAME and APPLICATION_NAME, marked in yellow, in the value for the URL.

- i. SERVER_NAME is the Domain Name Server (DNS) name of the web server where the application is hosted.
- ii. APPLICATION_NAME is the application name created in IIS.
- b) Windows Authentication value is No
- c) Binding Protocol used is **Basic**

3.5 STARTING THE SYSTEM

To start the system, perform following steps:

- 1. Referring to the document titled, "EIWS Admin Client Help," create an organization using the Survey Manager Admin Client. The organization key created with the new organization will be used at the time of publishing a form using the Epi Info 7 Form Designer.
- 2. Design your survey to be published to web using the Epi Info 7 Form Designer.
- 3. When the survey has been designed and is ready to publish, you will be required to provide the endpoint address of the Epi Info Survey Manager Service, authentication and protocol information described in section 3.4.2 step 13 in Epi Info 7 Form Designer. The information goes in the "Tools / Options" menu item in the Epi Info 7 Form Designer, on the "Web Survey" tab as shown below. After adding the address of the Epi Info Survey Manager Service to the endpoint address field, save the information by clicking OK.

Revision Date: 3/21/2016 Page 29 of 50

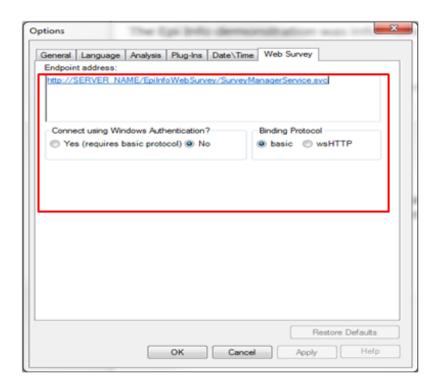


Figure 20: Option to provide the Survey Manager Service endpoint information in Epi Info 7 Form Designer

4. Start the process of publishing the designed survey to web by selecting the File > Publish Form to Web menu item on the Epi Info 7 Form Designer.

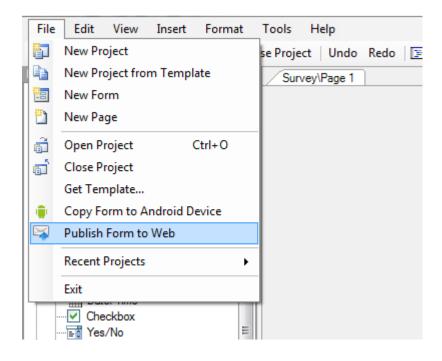


Figure 21: Publish Form to Web menu item under the File menu in Epi Info 7 Form Designer

Revision Date: 3/21/2016 Page 30 of 50

- 5. Provide the information in Introduction Page and Exit Page tabs of the Publish Form to Web dialog.
- 6. Provide the Organization key in Organization Key (required) text box in Publish Options tab and click the Publish Form button.
- 7. Upon successfully publishing the form using Epi Info 7, you will receive a URL for the survey as shown in the figure below.

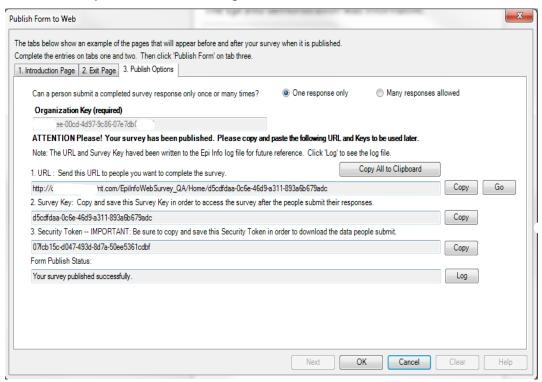


Figure 22: Publish Form to Web Dialog in Epi Info 7 Form Designer showing the result of successfully publishing the web survey

- 8. Access the survey in web browser using the generated URL to see if the survey is shown as expected.
- 9. Make sure that you have saved the URL, Survey Key and Security Token if the survey is to be used for collecting data in the production environment. It can be saved using the Copy All to Clipboard button, then pasting the information in a document. The information will be needed for downloading survey responses.

Note: The creation of an organization in Survey Manager Admin Client is the first test of proper connectivity to the database created in section 3.4.1. If the database wasn't configured correctly, or the connection block in section 3.4.2 steps 11 and 12 wasn't encrypted correctly, then this step will fail. If the step succeeds, the database and the application have been configured as expected.

Revision Date: 3/21/2016 Page 31 of 50

4 APPLICATION UPGRADE

If you are installing the Epi Info Web Survey system for the first time, please skip this section. This section describes the steps needed to upgrade an existing instance of the Epi Info Web Survey system to the latest version.

4.1 ACCESS CONTROLS

4.1.1 Database

The person updating the existing instance of the Epi Info Web Survey database should have full administrative access on the database server and the rights and privileges to update the database.

4.1.2 Application and services

The person updating and configuring the existing version of the system and services should have administrative access on the web server and should have full access and privileges to update a web application in Internet Information Services (IIS).

4.2 INSTALLING THE UPGRADED VERSION

The installation can be done using the **EIWSIntegrated** package. The package for installation of the system consists of two items: 1) the database in the **Database** folder; and 2) the application and services in the **ApplicationAndServices** folder. The Configuration section describes how these items are used.

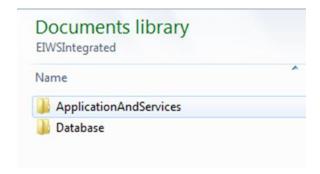


Figure 23: File systems showing components in the EIWSIntegrated package

4.3 CONFIGURATION

4.3.1 Database Configuration

The database configuration would involve applying the update to the existing instance of Epi Info Web Survey database on SQL Server 2008 database server. The update of the database may require assistance from a SQL Server DBA if

Revision Date: 3/21/2016 Page 32 of 50

access to the database server is managed by the DBA. The update script should be changed as needed for local circumstances or as per best practices followed by the organization deploying this system.

Revision Date: 3/21/2016 Page 33 of 50

- Choose the database server where the Epi Info Web Survey database is hosted. Log into the database server using an account which has admin privileges to update the database, manage database users and assign privileges to the users.
- 2. Make a backup of the Epi Info Web Survey database before attempting to apply the needed updates.
- 3. Open the provided script namely eiws_delta after selecting the Epi Info Web Survey database in SQL Server.

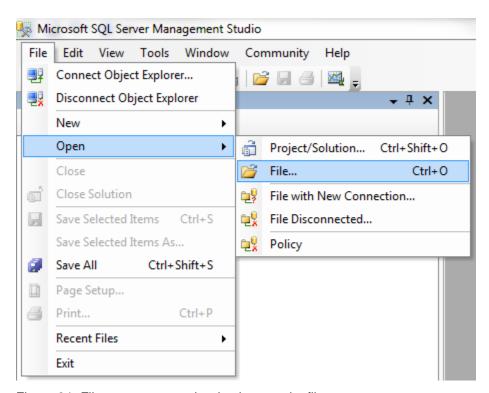


Figure 24: File menu to open the database script file

Revision Date: 3/21/2016 Page 34 of 50

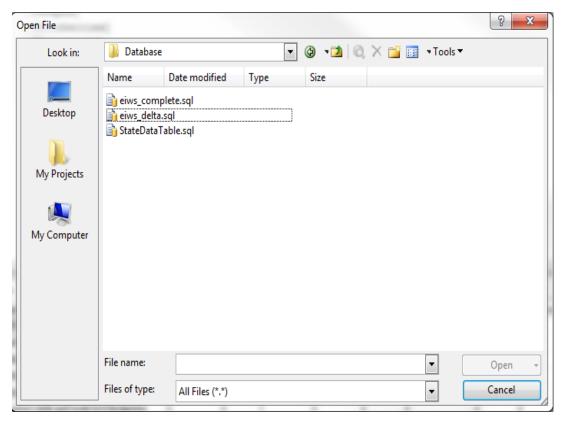


Figure 25: Open File dialog showing the eiws_delta script.

- 4. Make sure that Epi Info Web Survey database name (if it is EIWS or the name you had provided) displays in the Available Databases drop down list in Microsoft SQL Server Management Studio.
- 5. Execute the script to update the database.
- 6. Once the script has executed successfully the updates are applied. Refresh the Epi Info Web Survey database instance. In the object explorer navigate to the Epi Info Web Survey to validate the update. The first visual indicator of a successful database update is the presence of an Admin table under the Tables node in the object explorer.

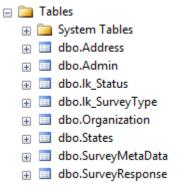


Figure 26: Confirmation that the new schema updates have been applied.

Revision Date: 3/21/2016 Page 35 of 50

7. You can also execute the StateDataTable.sql in case you are enabling account creation functionality and are in United States. The script populates list of states in United States in the States table to be used by Epi Info Web Survey system as part of User centric account creation option.

4.3.2 Application and Services Configuration

The steps below assume that the EpiInfoWebSurvey web site was previously configured as an application under the default web site.

- 1. Navigate to the folder called "EpiInfoWebSurvey" under "inetpub\wwwroot"
- 2. Make a backup of all contents in the EpiInfoWebSurvey folder before making any changes.
- 3. Make sure the web.config file of the backed up EpiInfoWebSurvey folder is immediately available for reference as it will be needed for updating the content of the new web.config file.
- 4. Delete the content of the EpilnfoWebSurvey folder under "inetpub\wwwroot" after making the backup.
- 5. From the EIWSIntegrated package, copy the content of the folder "EIWSIntegrated\ApplicationAndServices" to "inetpub\wwwroot\EpiInfoWebSurvey" folder.
- 6. Using your preferred editor, open the web.config file in EpiInfoWebSurvey site and the web.config file of the backed up site for editing.

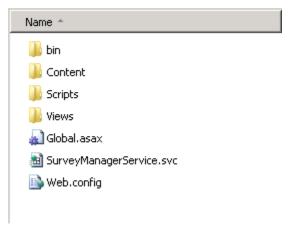


Figure 27: Web.config file for an integrated application

7. From the original web.config file that you backed up, copy and update the Email notification section, shown below, to the new web.config file.

Revision Date: 3/21/2016 Page 36 of 50

```
<add key="EMAIL_PASSWORD" value="XXXXXXXXXXXXXXXX"/>
<add key="SMTP_PORT" value="XXXXXXXXXXXX"/>
<add key="SMTP_HOST" value="XXXXXXXXXXXXXXXX"/>
```

8. From the original web.config file that you backed up, copy and update the Log Setting section, shown below, to the new web.config file.

```
<!-- Log Setting -->
<add key="LOGGING_SEND_EMAIL_NOTIFICATION" value="FALSE"/>
<add key="LOGGING_ADMIN_EMAIL_ADDRESS" value="XXXXXX"/>
<add key="LOGGING_EMAIL_SUBJECT" value="Epi Info Web Survey - Exception"/>
<add key="LOGGING_EMAIL_SUBJECT" value="Epi Info Web Survey - Exception"/></a>
```

8. From the original web.config file that you backed up, copy and update the URL and AdminKey in the Integrated SurveyManagerService Settings section, shown below, to the new web.config file.

```
<!--Integrated SurveyManagerService Settings-->
<add key="URL" value="http://SERVER_NAME/<APPLICATION_NAME/Home/"/>
<add key="AdminKey" value="A/kTiX1HhAef9pdWIbGCKs1NOcEvoxqUrSWahJoB7uGN3+/YROi4alwj9UWZLmXy"/>
```

9. From the original web.config file that you backed up, copy and update the EIWSEntities, shown below, to the new web.config file.

```
<add name="EIWSEntities" connectionString="ZB9j41Dfu3TKnIZ+DU0M+Wgiwd90y
sv0TTr9meqLYB91wwQoGQTabr0OwMBWNFLV48PcDXR7OAkFQYxhjN87IKzW1ueDk861PmzGP
Drmt0IxsKpeL3bFfaX6r5GnBC4K/0MeReTiJ7YGedDUwtrtsx+8e0xAusj2LW25tTdwGC0z/
qLhitzcJkzqS7IWQNb+y+TFc/0Hwrsb/6wKjomdt0kLkT+JqCgNHwVZ2q5NJapy+GOXUra0W
rQfuIEz6KQ8u034rK7U6mvTIH6Z644PSkcjXx2XFVciTMd/7r2cEbnI7dyBT8PX9KRZEwQJj
fNlG5SlvEbk/Wwtre4IR7T1A2rmbgnd11Phi80TUpM5yIbxFnW6ytvDVZq1afAhFqV/bv9rt
e7fQQjjxqxkE6rugw3upSKjnKtj0WemHApaNvtRlRnqNfADECl6DgcisqfC"/>
```

10. Update the value of EIWSADO according to the instructions in Step 13 of Section 3.4.2

```
<add name="EIWSADO" connectionString="EJuEgfj+SZ/i1picmKRdY0WUG+2b0LNqG39YC
5h1dKMx+cWdsLTQBBMO7a7xXPWWJ19sm2fURghVQuuZeWF0mXZah16nQtD0eYXgUomP92vg0ELp
bwsfoLWClezIf7knrLXpyUUy/qhbQ6rTP7QoZ0fCzH0HnRbqFE8QqjatmCo="/>
```

- 11. This should complete the Epi Info Web Survey site upgrade.
- 12. You may see some new settings as compared to those present in the web.config file of the backed up version. Refer to Section 3.4.2 on Application and Services configuration to customize the new settings. All the settings applicable to the latest version are listed in Appendix B at the end of this document.

Revision Date: 3/21/2016 Page 37 of 50

5 SYSTEM USAGE

5.1 INSTRUCTIONS

The Epi Info Web Survey system is used with Epi Info 7 to publish surveys created in the Epi Info 7 Form Designer. The process of publishing an Epi Info 7 survey creates a URL to access the survey on the web. This URL can be distributed to respondents by email, posted on a website, posted to a blog or social media sites, or by any other means. A survey participant completes the survey by opening the provided URL in their browser. The responses can be downloaded to Epi Info 7 any time after the first participant completes and submits a response.

5.2 CONVENTIONS AND ERROR MESSAGES

5.2.1 Epi Info Web Survey Manager Service Test

The first step before using the system involves the process of pinging Epi Info Web Survey Manager Service by typing its URL into the Survey Manager Admin Client. If you are not able to ping the service, the error message shown below is displayed.

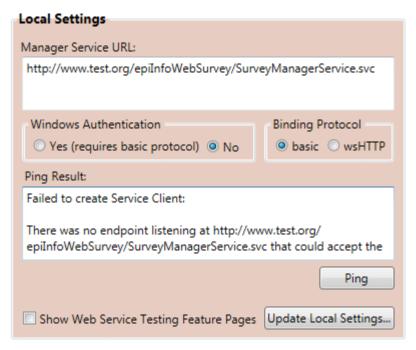


Figure 28: Error message when the Survey Manager Service is not accessible

The possible causes could be:

1. The Epi Info Web Survey Manager Service URL or Windows Authentication and/or Binding Protocol information is not correct. Please confirm the Windows Authentication and Binding Protocol information is correct. Also validate that the URL is correct by browsing to the URL in the browser. If the URL is correct you should get a page as shown below.

Revision Date: 3/21/2016 Page 38 of 50



Figure 29: Survey Manager Service accessible in browser.

2. If you do not get the page shown above then the system has not been configured properly and would require reconfiguration

5.2.2 Organization Account Creation Test

If you are able to successfully ping the Epi Info Web Survey Manager Service, the next step involves creation of an organization account using the Survey Manager Admin Client in order to publish a survey using Epi Info 7. If you are unable to create an organization account, you will get an error message similar to the one shown below.

Admin Key		
Admin Key:	•••••	
Add Organization		
Organization Name:	Test Org	
Organization Key:	7fb13ca2-fb52-46d7-a6a4-ae87c87834f9	
	Generate Key Add Key	
Message:	Error occurred while trying to add new organization key. Please try again.	
	The state of the s	

Figure 30: Error message upon request to create an account.

Revision Date: 3/21/2016 Page 39 of 50

The error indicates a problem with the request being processed by the Epi Info Web Survey Manager Service. The most common cause of this problem is the connection string pointing to the database.

5.2.3 Database Connection String Test

A problem with application connection string can be validated by navigating to the following URL in the browser:

http://SERVER_NAME/APPLICATION_NAME/EIWST/DataService

Update the SERVER_NAME and APPLICATION_NAME marked in yellow in the value for the URL.

- i. SERVER_NAME is the Domain Name Server (DNS) name of the web server where the application is hosted.
- ii. APPLICATION_NAME is the application name created in IIS.

If there is a problem with the application connection string, you would get an error message for the Database Test section of the results as shown in the figure below.

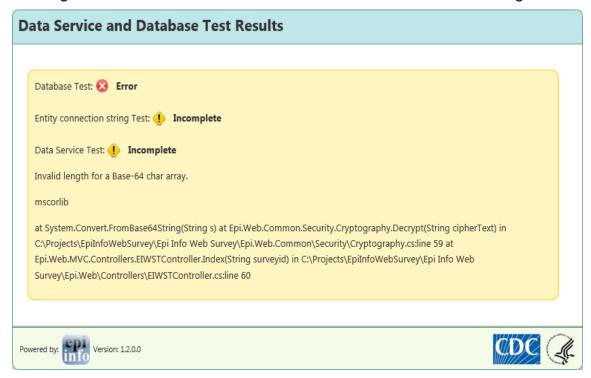


Figure 31: Epi Info Web Survey diagnostics view showing status when the application is not able to communicate with the database server.

After the indicator for various tests, there is some technical information on the cause of error. This is a validation that there is certainly something wrong with the connection string. This requires inspection of every part of the plain text connection string EIWSADO and making sure that it has the same format as provided in this documentation.

Revision Date: 3/21/2016 Page 40 of 50

After updating the EIWSADO connection string, open the test URL again. The result screen will get updated as shown below if the connection string is correct.

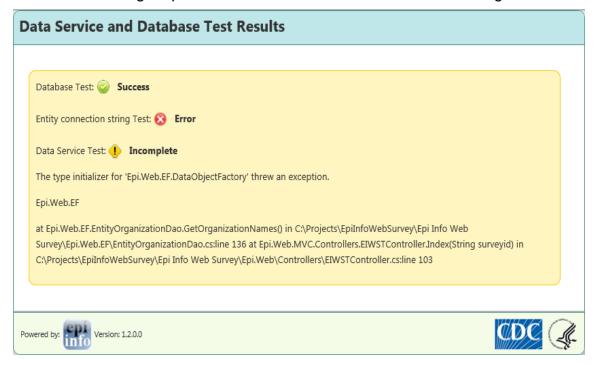


Figure 32: Epi Info Web Survey diagnostics view showing status when the application can communicate with the database server, but an error exists with the connection string.

5.2.4 Application's Database Connection String Test

Once the EIWSADO connection string is correct then use the relevant pieces of the plain text connection string to update the relevant section of the EIWSEntitites connection string according to the documentation. If the EIWSEntities connection string is correct, repeat the step as above by navigating to the URL again:

http://SERVER_NAME/APPLICATION_NAME/EIWST/DataService

If the EIWS Entities connection string is set up correctly, you should get the result as shown below.

Revision Date: 3/21/2016 Page 41 of 50

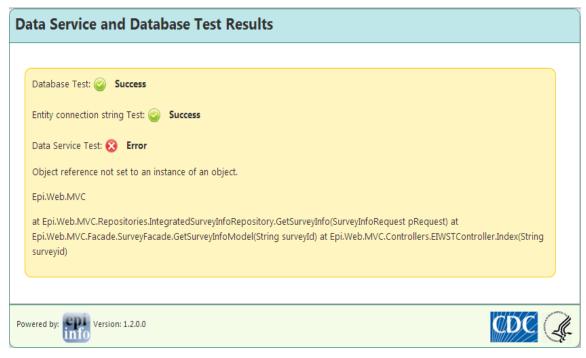


Figure 33: Epi Info Web Survey diagnostics view showing status when the applications connection strings are set up correctly.

5.2.5 Epi Info Web Survey Test

With the application connection string correctly set up, you should be able to successfully create an organization account using the Survey Manager Admin Client. Upon publishing the survey, browse to the following URL in your browser:

http://SERVER_NAME/APPLICATION_NAME/EIWST/DataService/SurveyKey

Update the SERVER_NAME and APPLICATION_NAME marked in yellow in the value for the URL:

- SERVER_NAME is the Domain Name Server (DNS) name of the web server where the application is hosted.
- ii. APPLICATION_NAME is the application name created in IIS.
- iii. SurveyKey represents the survey key received upon publishing a web survey from the Publish Form to Web dialog.

If the Epi Info Web Survey is not configured properly, you should get a result similar to one shown below upon browsing to the URL.

Revision Date: 3/21/2016 Page 42 of 50

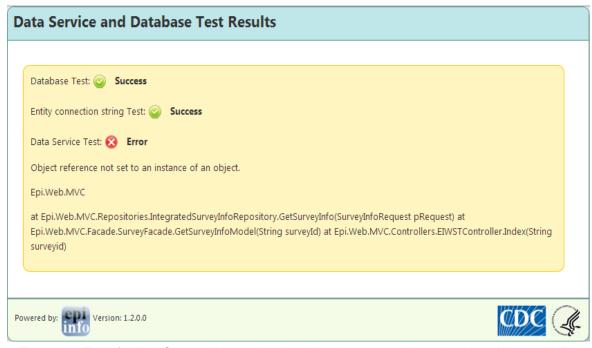


Figure 34: Epi Info Web Survey diagnostics view showing status when there is problem with Data Service component of the application.

If the system is set up correctly, then you should get a result similar to the one shown below upon browsing to the URL.

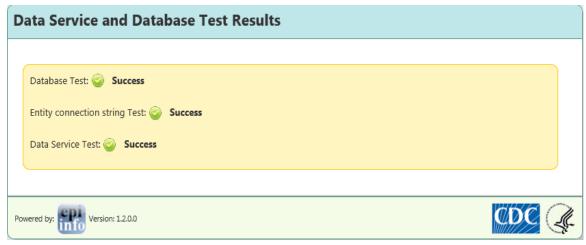


Figure 35: Epi Info Web Survey diagnostics view showing status for properly configured site.

At this point if you open the URL received in Epi Info 7 you should be able to see the Survey with a "Draft" watermark as shown below for a Sample Survey.

Revision Date: 3/21/2016 Page 43 of 50

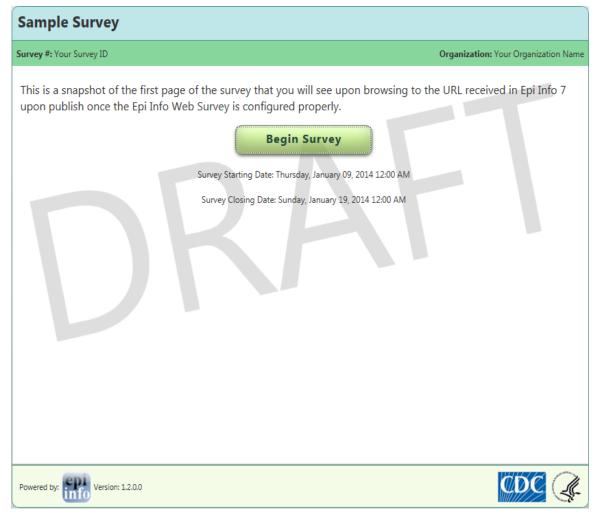


Figure 36: First page of Epi Info Web Survey when the system is configured properly.

Congratulations! You have successfully created and deployed a sample survey using Web Survey.

If there is a problem with the survey, with unsupported controls on the form, or with check code that is not supported, then you will receive an error message similar to one shown below. You should revisit your Epi Info Form, address the problem, and try again.

Revision Date: 3/21/2016 Page 44 of 50

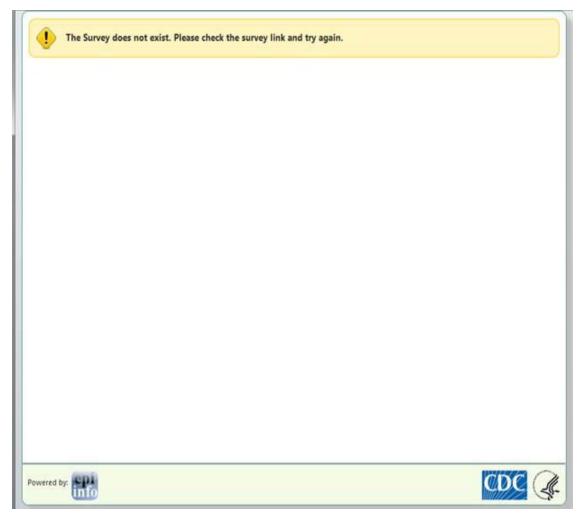


Figure 37: System error when the system is not configured properly.

Revision Date: 3/21/2016 Page 45 of 50

APPENDIX A: REFERENCES

The following table summarizes the documents referenced in this document.

Document Name and Version	Description	Location
EIWS Admin Client Help	This document describes the Epi Info Web Survey Manager Admin Client and how to use it.	/EIWSIntegrated/Documents

Revision Date: 3/21/2016 Page 46 of 50

APPENDIX B: APPLICATION SETTINGS

The following table summarizes all the settings applicable to the latest version of Epi Info Web Survey application and services.

Category	Settings
MVC Setting	<add key="aspnet:UseTaskFriendlySynchronizati onContext" value="true" /></add
	<add key="webpages:Version" value="2.0.0.0"></add>
	<add key="webpages:Enabled" value="false"></add>
	<add key="PreserveLoginUrl" value="true"></add>
	<add key="ClientValidationEnabled" value="true"></add>
	<add key="UnobtrusiveJavaScriptEnabled" value="true"></add>
Epi Info Web Survey Version	<add key="EIWS_Version" value="Version Number"></add>
Email Notification	<add key="EMAIL_USE_AUTHENTICATION" value="FALSE"/></add
	<add key="EMAIL_USE_SSL" value="FALSE"></add>
	<add key="EMAIL_FROM" value="XXXXXXXXXXXXXXXXXX"></add>
	<add key="EMAIL_PASSWORD" value="XXXXXXXXXXXXXXXX"></add>
	<add key="SMTP_PORT" value="XXXXXXXXXX"></add>
	<add key="SMTP_HOST" value="XXXXXXXXXXXXX"></add>

Revision Date: 3/21/2016 Page 47 of 50

Log Setting	<add key="LOGGING_SEND_EMAIL_NOTIFICA TION" value="FALSE"/></add
	<add key="LOGGING_ADMIN_EMAIL_ADDRES S" value="XXXXX"/></add
	<add key="LOGGING_EMAIL_SUBJECT" value="Epi Info Web Survey - Exception"></add>
Caching	<add key="CACHE_IS_ON" value="FALSE"></add>
	<add key="CACHE_DURATION" value="20"></add>
	<add key="CACHE_SLIDING_EXPIRATION" value="TRUE"/></add
Messages	<add key="SURVEY_NOT_EXISTS" value="The Survey does not exist. Please check the survey link and try again."></add>
	<add key="SURVEY_SUBMITED_MESSAGE" value="This survey has been submitted."></add>
	<add key="SURVEY_CLOSED_MESSAGE" value="This survey is currently closed. Please contact the author of this survey for further assistance."></add>
	<add key="SURVEY_SUBMISSION_MESSAGE" value="Thank you! Your survey has been submitted."></add>
Integrated Survey Manager Service Setting	<add key="URL" value="http://SERVER_NAME/APPLICATIO N_NAME/Home/"></add>

Revision Date: 3/21/2016 Page 48 of 50

	oxqUrSWahJoB7uGN3+/YROi4alwj9UWZL mXy"/>
	add key="maxBytesPerRead" value="2048000"/>
	<add key="BandwidthUsageFactor" value="50"></add>
Package Type	<add key="INTEGRATED_SERVICE_MODE" value="TRUE"/></add
Omniture	<add key="OMNITURE_IS_ENABLED" value="False"></add>
Connection strings	<add <br="" name="EIWSEntities">connectionString="encrypted connection string" /></add>
	<add connectionstring="Encrypted connection string" name="EIWSADO"></add>
Account Creation	<add key="APPLICANT_VALIDATION_IS_ENAB LED" value="False"/></add
	<add key="NOTIFY_ADMIN_IS_ENABLED" value="TRUE"></add>
	<add key="ENDPOINT_ADDRESS" value="http://SERVER_NAME/APPLICATIO N_NAME/SurveyManagerService.svc"></add>
	<add key="BINDING_PROTOCOL" value="Basic"></add>
	<add key="WINDOW_AUTHENTICATION" value="No"></add>
	<add key="ACCOUNT_TYPE" system_admin_email"="" value="ORGANIZATION</td></tr><tr><td></td><td><add key=" value<br="">="me@here.now"/></add>

Revision Date: 3/21/2016 Page 49 of 50

	<add key="NOTIFY_ADMIN_EMAIL" value<br="">="me@here.now" /></add>
	<add key="EPI_INFO_DOWNLOAD_URL" value="http://wwwn.cdc.gov/epiinfo/7/"></add>
User Interface	<add key="CUSTOM_THEME" value="CLASSIC"></add>
	<add key="TECHNICAL_SUPPORT_IS_ENABLE D" value="True"/></add
	<add key="TECHNICAL_SUPPORT_EMAIL" value="abcd@CSTE.com"/></add
	<add key="TECHNICAL_SUPPORT_PHONE" value="111-111-111"/></add
	<add key="FOOTER_LOGO_PATH" value="~/Content/images/cstelogo.jpg"></add>
	<add key="SHOW_HOME_LOGO" value="true"></add>
	<add key="HOME_LOGO_PATH" value="~/Content/images/cstelogo.jpg"></add>
Pre-generated URL	<add key="ResponseURL" value=""></add>

Revision Date: 3/21/2016 Page 50 of 50